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PATENT  
Atty. Dkt. AMAT/3786.Y1/CMP/CMP/RKK

## IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

In re Application of:  
Li, et al.

Serial No.: 09/469,709

Confirmation No.: 5296

Filed: December 21, 1999

For: High Through-Put CU CMP  
With Significantly Reduced  
Erosion

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Group Art Unit: 1763

Examiner: George A. Goudreau

Commissioner for Patents  
P.O. Box 1450  
Alexandria, VA 22313-1450

Dear Sir:

CERTIFICATE OF MAILING 37 CFR 1.8	
I hereby certify that this correspondence is being deposited on <u>12/22</u> , 2003 with the United States Postal Service as First Class Mail in an envelope addressed to: Commissioner for Patents, P.O. Box 1450 Alexandria, VA 22313-1450.	
Date <u>12/22/2003</u>	Signature <u>B. - J.</u>

## SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT

The Applicants, and the Attorney who signs below on the basis of the information supplied by the inventor and the information in his file, submit herewith patents, publications, or other information of which they are aware, which may be material to the examination of this application and in respect of which there may be a duty to disclose in accordance with 37 CFR § 1.56.

While the information submitted in this Supplemental Information Disclosure Statement may be material pursuant to 37 CFR § 1.56, it is not intended to constitute an admission that any patent, publication, or other information referred to therein is prior art for this invention unless specifically designated as such.

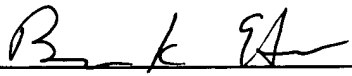
In accordance with 37 CFR § 1.97, this Supplemental Information Disclosure Statement is not to be construed as a representation that a search has been made or that no other possibly material information as defined under 37 CFR § 1.56(a) exists.

The patents and/or publications submitted herewith are set forth on the attached Form PTO-1449.

Applicants certify that all references submitted with this disclosure were cited in a communication from a foreign patent office dated November 12, 2003, which communication is enclosed, not more than three months prior to the filing of this Supplemental Information Disclosure Statement.

The Commissioner is hereby authorized to charge sum of \$180.00 due under 37 CFR § 1.17(p) pursuant to § 1.97, and any other fee necessary to make this submission timely, to the Deposit Account No. 20-0872/AMAT/3786.Y1/BKH.

Respectfully submitted,

  
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U.S. Department of Commerce, Patent and Trademark Office				Docket No.		Serial No.	
(PTO Form 1449 modified)				AMAT/3786.Y1/CMP/ CMP/RKK		09/469,709	
<b>SUPPLEMENTAL INFORMATION DISCLOSURE STATEMENT BY APPLICANT</b>				Applicant Li, et al.		Confirmation No. 5296	
(Use several sheets if necessary)				Filing Date		Group	
Examiner George A. Goudreau				December 21, 1999		1763	
<b>U.S. Patent Documents</b>							
*Examiner Initial		Document Number	Issue Date	Applicant(s) Name	Class	Subclass	Filing Date If Appropriate
	A1	6,001,730	12/14/1999	Farkas, et al.	438	627	10/20/1997
	A2	5,994,224	11/30/1999	Sandhu, et al.	438	692	12/17/1997
	A3	5,738,574	04/14/1998	Tolles, et al.	451	288	10/27/1995
	A4	5,516,346	05/14/1996	Cadien, et al.	51	308	05/13/1994
<b>Foreign Patent Documents</b>							
*Examiner Initial		Document Number	Date	Country	Class	Subclass	Translation
							YES NO
	B1	1 085 067	11/31/1999	EP	C09G	1/02	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B2	1 093 161	10/11/2000	EP	H01L	21/768	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B3	1 057 591	12/06/2000	EP	B24B	37/04	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B4	00/35627	06/22/2000	WO	B24B	-----	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B5	98/49723	11/05/1998	WO	H01L	21/321	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B6	00/30154	05/24/2000	WO	H01L	-----	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B7	00/59031	10/05/2000	WO	H01L	21/768	<input type="checkbox"/> <input checked="" type="checkbox"/>
	B8	00/25984	05/11/2000	WO	B24B	37/04	<input type="checkbox"/> <input checked="" type="checkbox"/>
<b>OTHER ART</b>							
*Examiner Initial		Including Author, Title, Date, Pertinent Pages, Etc.					
	C1	European Search Report for 00311569.8 dated November 12, 2003 (AMAT/3786.EP)					
	C2	Peterson, et al., "Investigating CMP and Post-CMP Cleaning Issues for Dual-Damascene Copper Technology" Micro Computerist, Volume 17 No. 1 January 1999 Pages 27-32, 34.					
	C3	Hayashi, et al. "A New Two-Step Metal-CMP Technique for a High Performance Multilevel Interconnects Featured by Al-AND CU in Low Epsilon, Organic Film-Metallizations" 1996 Symposium on VLSI Technology, Digest of Technical Papers Pages 88-89.					
	C4	Schraub, et al., "Chemical Mechanical Polishing: Future Processing Require CMP Tool Flexibility" Proceedings of the SPIE, Volume 3508 September 1998 Pages 146-154					
	C5	Wijekoon, et al. "Development of a Production Worthy Copper CMP Process" Advanced Semiconductor Manufacturing Conference and Workshop, September 1998, Pages 354-363.					
Examiner					Date Considered		
*EXAMINER: Initial if reference considered, whether or not citation is in conformance with MPEP 609; Draw line through citation if not in conformance and not considered. Include copy of this form with your communication to applicant.							